



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,736	03/14/2001	Takayoshi Kurita	1503.65307	5363

24978 7590 02/06/2007
GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

KLIMACH, PAULA W

ART UNIT	PAPER NUMBER
----------	--------------

2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/809,736	KURITA, TAKAYOSHI	
	Examiner	Art Unit	
	Paula W. Klimach	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/24/06 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 3-6, and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candelore et al (6,975,725 B1) in view of Comerford et al (5,109,413), and further in view of Proust et al (6,216,014 B1).

In reference to claims 1, 9-13, Canderlore discloses a conditional access system and method are disclosed allowing the use of a standard smart card (abstract). The conditional access system includes a smart card interface (exclusion control unit) and a CA API (an access control unit; Fig. 4). The CA API permits the application to access the smart card, in response to an access request for the smart card from the application (function) (column 5 line 15 to column 6 lines 37).

Canderlore does not disclose the exclusive access of the smart card and allowing access when the smart card when the application has already been authenticated.

Comerford discloses a system wherein the rights to execute software are conditional. On of the conditions to access software is the number of times of execution (column4 lines 21-26). By making a condition of execution of the software, the number of times that the software, when the number of times for execution of the software is only 1 then there is exclusive access to the token and disk (smart card), since the counter would go to zero (column 19 lines 5-22). This would be exclusive access of the smart card because after the application has executed no other application will be allowed access since the counter would be zero, and therefore the conditions for execution, would not allow the application to execute.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include the conditions for execution as in Comerford in the system of Canderlore. One of ordinary skill in the art would have been motivated to do this because it would provide the software vendor flexibility and therefore a return policy by being able to control the conditions of executing the software.

Although Canderlore discloses an access control system, and Comerford discloses access control to the smart card, neither Kimlinger nor Comerford disclose access control unit manages authentication between applications and the smart card using process Ids of the applications.

Proust discloses a system wherein each object is also associated with a plurality of access control policy indicators each indicating, for one of the applications, which access policy to use with the application, the control access policy indicators being stored in the data memory (abstract). The application discloses a system wherein said access control unit manages

Art Unit: 2135

authentication between applications and the smart card using process Ids (part 32 Fig. 3B) of the applications (column 12 lines 30-34).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the application process Ids to control access between applications and smart cards. One of ordinary skill in the art would have been motivated to do this because this would enable the access control to be flexible and therefore tailored to the systems needs and easily changed for a specific user.

In reference to claim 3, wherein the access control unit rejects the access request from the application allowed the exclusive access if the application has not been authenticated for the smart card. The system disclosed by Comerford authenticates the token and therefore would not allow access if the token was not authentic.

Canderlore does not disclose authentication of the token before the application executes.

The access control unit disclosed by Comerford suggests rejecting the access request from the application allowed the exclusive access if the application has not been authenticated for the smart card (column 18 lines 9-25). The system disclosed by Comerford authenticates the token and therefore would not allow access if the token was not authentic

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include the authentication of Comerford in the system of Canderlore. One of ordinary skill in the art would have been motivated to do this because it would provide the software vendor flexibility and therefore a return policy by being able to control the conditions of executing the software.

In reference to claim 4, wherein said access control unit manages authentication between an application and smart card using a process ID of the application.

Canderlore does not disclose the use of the process ID of the application to authenticate the application.

Comerford suggest the use of the process ID of the application to manage the authentication between the application and the token (smart card) before execution. This is performed the application looking for the execution criterion and would therefore need the process ID to identify the application (column 19 lines 4-12).

In reference to claim 5, wherein said access control unit changes an application authenticated for a smart card into non-authenticated application when the smart card is extracted from a smart card reader (column 3 lines 18-35). Canderlore discloses checking if there is a smart card in the reader before turning the smart card on, therefore suggesting that the smart card becomes non-authentic when it is extracted.

In reference to claim 6, wherein when said application accesses the smart card plural times, said application issues the exclusive access request to said exclusion control unit each time the access is started, and issues an exclusive access cancellation notification to said exclusion control unit each time the access terminates (column 3 lines 18-35).

Claim 2, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canderlore and Comerford and further in view of Proust as applied to claim 1 above, and further in view of Silberschatz.

In reference to claims 2 and 7, wherein the exclusion control unit queues an application that issues an exclusive access request in response an exclusive access request for the smart card from the application when the smart card has no logical channel exclusively accessed by another application.

Canderlore, Comerford, and Proust do not discloses the control unit queues an application that issues an access request.

Silberschatz discloses a monitor that uses a First Come First Serve Queue (FCFS) to control the access of one resource (pages 187-188).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a queue to control the access of resources as disclosed by Silberschatz in the system of Canderlore. One of ordinary skill in the art would have been motivated to do this because it would ensure that the process that waits the longest for the resource will be able to use it first.

In reference to claim 8, wherein the access control unit request a smart card to cancel authentication an application, in response to a smart card authentication cancellation notification from when the application authenticated for the smart card smart authentication application, last application

Canderlore, Comerford, and Proust do not disclose the access control unit request a smart card to cancel authentication an application, in response to a smart card authentication cancellation notification from when the application authenticated for the smart card smart authentication application, last application

Silberschatz discloses the release of a resource when the queue is ended and therefore the cancellation of the authentication application when the application is the last application (page 187).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a queue to control the access of resources as disclosed by Silberschatz in the system of Canderlore. One of ordinary skill in the art would have been motivated to do this because it would ensure that the process that waits the longest for the resource will be able to use it first.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chaney et al

6,594,361 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-3854. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

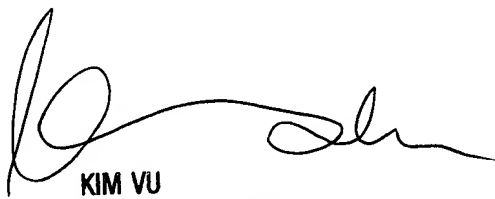
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2135

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK

Wednesday, January 31, 2007



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2135